

**Quick Reference Guide**  
**TESS 1 Wireless Installation Instructions**

**Pin# 1** - Connect to chassis ground.

**Pin# 2** - To ECM switched feed wire. (See Note 1)

**Pin# 3** - Refer to the ECM Jump Configuration & ECM Set RPM Guide Sheet

**Pin# 4** - To Emergency Hydraulic Pump Relay.

**Pin# 5** - Tee into the starter wire from the key switch.

**Pin# 6** - Not Used

**Pin# 7** - To ECM switched feed wire. (See Note 1)

**Pin# 8** - Refer to the ECM Jump Configuration & ECM Set RPM Guide Sheet.

**Pin# 9** - Not Used

**Pin# 10**- To the on/off switch (PTO),12 volt ignition fused. (15 amps) ( See Note 3)

**1)Note:** The ECM switched feed wire has to be cut. The one wire will be joined to pin# 2 and the other wire will be joined to pin# 7.

**2)Note:** Interlocks can be install in pin# 1 and pin# 10.

**3) Note:** This 12v signal must stay latched at all times during the TESS I Wireless operation.

**ECM ENGINE JUMP CONFIGURATIONS**

**Positive Input Engines: Volvo, Mack, International Engines**

**Negative Input Engines: Caterpillar, Cummins, Detroit, Mercedes**

**Note: Use this Guide to correctly send the proper signal out to the ECM. If the correct signal is not send out it could cause damage to the ECM.**

**Pin# 2&7 - Remote Engine Stop - No Jump**

**Pin# 4 - Emergency Hydraulic Pump - Determine the output needed whether it needs a Positive signal or a Negative signal to operate the E-Pump Solenoid.**

**Pin# 5 - Remote Starter Output - Jump Positive**

**Mini Fuse 3-15 Amp**

**Negative Jump**



**Positive Jump**



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**\*\*\*Refer to the TESS 1 Wireless Operation Manual for more detailed information\*\*\***

## 10 PIN CONNECTOR

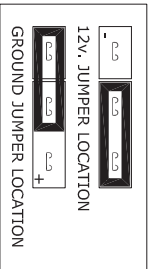
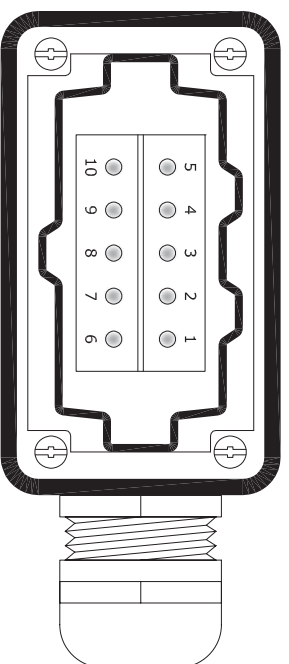


DIAGRAM 1

### ECM ENGINE CONFIGURATIONS

#### Positive Input Engines

Volvo, International, Mack

#### Negative Input Engines

Cat, Cummins, Detroit, Mercedes

**NOTE:** ECM Engine Configurations pertains to Throttle Relay Jumper Settings ONLY.

### RELAY STATES

#### MOMENTARY RELAYS

Engine Start, E-Stop, E-Pump

#### LATCHED RELAYS

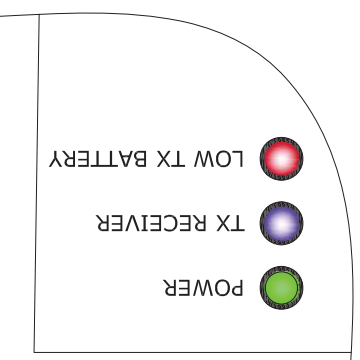
Throttle

**NOTE:** Relay states are programmable refer to programming instructions for further information.

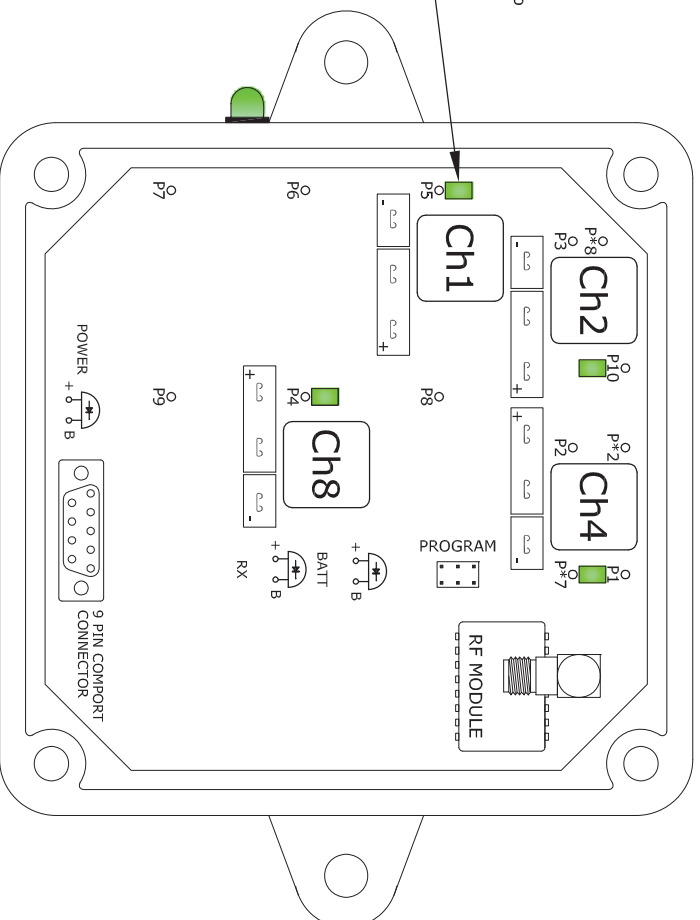
### RELAY INDICATOR LED'S

Indicates input signal received from transmitter.

### LED INDICATORS



## TESS 1 INTERNAL LAYOUT



### JUMPER SETTINGS

The Tess 1 Wireless System is equipped with internal relay jumpers to accommodate positive & negative signal inputs/outputs. Jumper settings are dependent on your vehicle ECM electrical systems and required output signals (Ref. ECM Engine Configurations). Each relay has its own jumper set directly below and a standard mini fuse is all that is required to complete the appropriate signal jump. Fuse ratings should be a min. of 3 amp. and up to a max. of 15 amps. DIAGRAM 1 describes the appropriate jumper locations for positive & negative system settings.

**NOTE:** The E-Stop Relay is a N/C circuit and for its intended purpose does not require a jumper.

### LED INDICATORS

**Green** - This light will light up when ever the system is given a 12v dc signal and ground at the appropriate inputs on the connector.

**Blue** - This light will flash when you push any button on the transmitter. When the light is flashing, the receiver is receiving data from transmitter. If you are pressing the button on the Transmitter, and blue LED is not flashing, refer to the troubleshooting section in your Tess manual.

**RED** - When this light is flashing with beeping sound. The last Transmitter which sent a signal to the receiver has a battery with Low Power. You have to exchange battery.

### TESS 203 WIRING INSTRUCTIONS

- | PIN | DESIGNATION   |
|-----|---|
| P1  | Tee into the ground side of the PTO light wire allowing the engagement of the PTO to activate the TESS 1 Control System or to chassis ground. |
| P2  | To ECM switched feed wire. (See Note 1)   |
| P3  | Refer to the ECM Jump Configuration & ECM Set RPM Guide Sheet.  |
| P4  | To Emergency Hydraulic Pump Relay.  |
| P5  | Tee into the starter wire from the key switch.  |
| P6  | Not Used  |
| P7  | To ECM switched feed wire. (See Note 1)   |
| P8  | Refer to the ECM Jump Configuration & ECM Set RPM Guide Sheet.  |
| P9  | Not Used  |
| P10 | PTO On/Off switch (12 volt ignition fused 15 amps) See Note 3.  |
- Note:** The ECM switched feed wire has to be cut. The one wire will be joined to pin # 2 and the other wire will be joined to pin # 7.
  - Note:** Interlocks can be install in pin # 1 and/or pin # 10.
  - Note:** This 12v signal must stay latched at all times during the TESS 1 Wireless operation to allow for proper operation.

Name:		Customer:	
Revision Date:		All	
Revision:		Application / Product:	
Revision Notes:		Internal receiver layout~Jumper descriptions~Start Stop Throttle E~Pump	
Name:		Date Created:	
TESS 1 Wireless Controller System		04 July 07	
TESS203 Receiver Quick Reference Sheet		Drawing Type:	
Revision Notes:		Layout	
Dwg. Scale:		Sheet Number:	
N/A		1 of 2	
Reference Dwg:		Dwg Number:	
		46-02-023010-XX	

